

IN THE CLAIMS

Please amend the claims as follows.

1. (Currently amended) A geminivirus silencing vector comprising a geminivirus genome comprising: the geminivirus AL1, AL2 and AL3 coding sequences; and heterologous DNA, said heterologous DNA comprising at least, in sense orientation, a fragment of a gene endogenous to a plant that occurs naturally in the plant genome, wherein the fragment is of a size sufficient to induce silencing ~~wherein said heterologous DNA is constitutively expressed and said AL1, AL2 and AL3 coding sequences are bidirectionally transcribed from said geminivirus silencing vector, and~~

~~wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.~~

2. (Currently amended) ~~A~~The vector according to claim 1, wherein said heterologous DNA replaces a segment of the coding sequence for the geminivirus coat protein.

3. Canceled

4. (Currently amended) ~~A~~The vector according to claim 1, wherein said heterologous DNA is operably ~~associated~~linked with a promoter that is ~~associated~~linked with said endogenous plant gene.

5. (Currently amended) ~~A~~The vector according to claim 1, wherein said heterologous DNA is operably ~~associated~~linked with the geminivirus coat protein promoter.

6-11. Canceled

12. (Currently amended) A DNA construct comprising a geminivirus genome wherein the DNA encoding the geminivirus coat protein has been replaced in part or in total with heterologous DNA comprising, in sense orientation, at least a fragment of an endogenous plant gene that occurs naturally in the plant genome and wherein the fragment is of a size sufficient to induce silencing.

13. (Currently amended) ~~A~~The DNA construct according to claim 12, wherein said heterologous DNA is operably-associated~~ed~~linked with a promoter.

14. (Currently amended) ~~A~~The DNA construct according to claim 13, wherein said promoter is the promoter that is ~~associated~~operably linked with said endogenous plant gene.

15. (Currently amended) ~~A~~The DNA construct according to claim 13, wherein said promoter is the geminivirus coat protein promoter.

16-30. Canceled.

31. (Currently amended) A plant cell comprising a~~the~~ geminivirus silencing vector according to claim 1.

32. (Previously presented) A plant comprising a plurality of cells according to claim 31.

33- 41. Canceled

42. (Currently amended) A geminivirus silencing vector comprising a Tomato Golden Mosaic Virus (TGMV) genome ~~which contains~~comprising heterologous DNA, said heterologous DNA comprising, in sense orientation, at least a fragment of a gene endogenous to a plant, wherein the fragment is of a size sufficient to induce silencing~~wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.~~

43. (Previously presented) The vector according to claim 42, wherein said gene endogenous to a plant occurs naturally in the plant genome.

44. (Currently amended) A geminivirus silencing vector comprising an African Cassava Mosaic Virus (ACMV) genome ~~which contains~~ comprising heterologous DNA, said heterologous DNA comprising, in sense orientation, at least a fragment of a gene endogenous to a plant, wherein the fragment is of a size sufficient to induce silencing and wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.

45. (Previously presented) The vector according to claim 44, wherein said gene endogenous to a plant occurs naturally in the plant genome.

46. (Currently amended) A DNA construct comprising a Tomato Golden Mosaic Virus (TGMV) genome, wherein the DNA encoding the TGMV coat protein has been replaced in part or in total with heterologous DNA comprising, in sense orientation, at least a fragment of an endogenous plant gene, wherein the fragment is of a size sufficient to induce silencing.

47. (Previously presented) The vector according to claim 46, wherein said gene endogenous to a plant occurs naturally in the plant genome.

48. (Currently amended) A DNA construct comprising an African Cassava Mosaic Virus (ACMV) genome, wherein the DNA encoding the ACMV coat protein has been replaced in part or in total with heterologous DNA comprising, in sense orientation, at least a fragment of an endogenous plant gene, wherein the fragment is of a size sufficient to induce silencing.

49. (Previously presented) The vector according to claim 48, wherein said gene endogenous to a plant occurs naturally in the plant genome.

50. (Currently amended) A method of silencing the expression of an endogenous plant gene in a plant cell, comprising inoculating said plant cell with a geminivirus silencing vector comprising a geminivirus genome which contains heterologous DNA, said heterologous DNA comprising ~~at least~~ a fragment of a gene endogenous to a plant, wherein the fragment is of a size sufficient to induce silencing.

51. (Previously presented) The vector according to claim 50, wherein said gene endogenous to a plant occurs naturally in the plant genome.

52. (Currently amended) A method of silencing the expression of an endogenous plant gene in a plant cell, comprising inoculating said plant cell with a DNA construct comprising a geminivirus genome, wherein the DNA encoding the geminivirus coat protein has been replaced in part or in total with heterologous DNA comprising ~~at least~~ a fragment of an endogenous plant gene, wherein the fragment is of a size sufficient to induce silencing.

53. (Previously presented) The method according to claim 52, wherein said gene endogenous to a plant occurs naturally in the plant genome.

54. (Currently amended) A method of systemically silencing expression of an endogenous plant gene in a plant, comprising inoculating said plant with a geminivirus silencing vector comprising a geminivirus genome which contains heterologous DNA, said heterologous DNA comprising ~~at least~~ a fragment of a gene endogenous to a plant, wherein the fragment is of a size sufficient to induce silencing.

55. (Previously presented) The method according to claim 54, wherein said gene endogenous to a plant occurs naturally in the plant genome.

56. (Currently amended) A method of systemically silencing expression of an endogenous plant gene in a plant, comprising inoculating said plant with a DNA construct comprising a geminivirus genome, wherein the DNA encoding the geminivirus coat protein has been replaced in part or in total with heterologous DNA

comprising ~~at least~~ a fragment of an endogenous plant gene, wherein the fragment is of a size sufficient to induce silencing.

57. (Previously presented) The method according to claim 56, wherein said gene endogenous to a plant occurs naturally in the plant genome.

58-61. Canceled.

62. (Currently amended) A geminivirus silencing vector comprising a Tomato Golden Mosaic Virus (TGMV) genome comprising: the TGMV AL1, AL2 and AL3 coding sequences operably associated with an AL1 promoter, and heterologous DNA, said heterologous DNA operably associated with a TGMV coat protein promoter and comprising ~~at least, in sense orientation,~~ a fragment of a gene endogenous to a plant ~~that occurs naturally in the plant genome, wherein the fragment is of a size sufficient to induce silencing wherein said heterologous DNA and said AL1, AL2 and AL3 coding sequences are bidirectionally transcribed from said geminivirus silencing vector, and wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.~~

63. (Previously presented) A method of silencing expression of an endogenous plant gene in a plant cell, comprising inoculating said plant cell with a geminivirus silencing vector according to claim 42.

64. (Currently amended) A method of silencing the expression of an endogenous plant gene in a plant cell, comprising:

introducing a nucleic acid ~~sequence~~ encoding the geminivirus movement proteins into said plant cell; and

inoculating said plant cell with a geminivirus silencing vector comprising a geminivirus genome ~~which contains~~ comprising heterologous DNA comprising ~~at least~~ a fragment of a gene endogenous to a plant, wherein the fragment is of a size sufficient to induce silencing.

65. (Previously presented) The method of claim 64, wherein said plant cell is a cell from a species of *Nicotiana* and said geminivirus silencing vector is a Tomato Golden Mosaic Virus (TGMV) silencing vector.